



Patent
Attorney's Docket No. 022701-803

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)	
)	
Stefan BREUNIG et al.)	Group Art Unit: 1712
)	
Application No.: 09/202,244)	Examiner: M. Moore
)	
Filed: February 19, 1999)	Confirmation No.: 2643
)	
For: METHOD FOR PREPARING)	
SILICONE OILS BY HYDROSILYLATION)	
... HETEROGENEOUS CATALYTIC)	
COMPOSITION)	
)	

DECLARATION PURSUANT TO 37 C.F.R. §1.132 BY
Stefan BREUNIG

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, *Stefan BREUNIG*, state that:

- (1) I am a citizen of Germany, and reside at 13 rue Neuve, 38200 Villette de Vienne, France.
- (2) I have been employed by RHODIA from 1995 to the present date. My current title is Application Manager.
- (3) I was awarded a Ph.D. degree in Chemistry from the University of Maburg/Lahn. My *curriculum vitae* is attached hereto.
- (4) I have substantial expertise in the field of silicone chemistry, including the preparation of functionalized silicone oils.

(5) I have reviewed the prior art rejections cited by the Examiner during prosecution of this application. Based thereon, it is my understanding that the Examiner has maintained her position that claims 22, 24, 25, 27-30, 32, 41, 43, 44 and 46-48 are anticipated by, or in the alternative, obvious over Jachmann (U.S. Patent No. 5,187,251). Additionally, I understand that the Examiner has maintained her position that claims 34 and 36-38 are anticipated by Jachmann and that claims 23, 30, 31, 33, 39, 40 and 42 are unpatentable over Jachmann. Finally, I understand that the Examiner has also rejected claims 22, 24, 25, 27-32, 34, 36-41, 43, 44 and 46-48 under 35 U.S.C. §103 as being unpatentable over Koshar (U.S. Patent No. 4,313,988) in view of Chandra (U.S. Patent No. 4,064,154) or Jachmann. Based on the following, I respectfully disagree with the Examiner's conclusions.

(6) I have carefully read Jachmann, Koshar and Chandra. Based on this review, it is my opinion that the claimed invention is neither anticipated, nor would it have been obvious over any of these references, alone or in combination.

(7) The present invention is directed to a novel process for the preparation of functionalized silicone oils having at least one hydrocarbon-containing ring in which is included an oxygen atom. In particular, the present invention relates to a process for the hydrosilylation between polyorganohydrosiloxanes and unsaturated units including at least one hydrocarbon-containing ring having an oxygen atom. Some of the advantages associated with the claimed process include the formation of a polyorganosiloxane having a stable viscosity and being non-turbid.

(8) Claims 46-48, the sole independent claims now pending in the application recite conducting the hydrosilylation reaction "in the presence of a heterogeneous catalytic composition to reduce reactions that can form a gum and/or resin during devolatilization" and "devolatilizing a silicone oil obtained from the hydrosilylation reaction."

(9) Because Jachmann fails to expressly or inherently describe devolatilizing a silicone oil obtained from a hydrosilylation reaction, which is conducted in the presence of a heterogeneous catalytic composition to reduce reactions that can form a gum and/or resin

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during devolatilization, as recited in the independent claims, Jachmann does not anticipate the processes of claims 46, 47 and 48.

(10) Additionally, neither Jachmann nor the asserted combinations of Koshar in view of Chandra or Koshar in view of Jachmann render the processes of claims 46-48 obvious, because neither Jachmann nor the asserted combinations teach or suggest all of the elements of claims 46, 47 and 48. Specifically, neither Jachmann nor the asserted combinations of references teach or suggest devolatilizing a silicone oil obtained from a hydrosilylation reaction, which is conducted in the presence of a heterogeneous catalytic composition to reduce reactions that can form a gum and/or resin during devolatilization.

(11) Moreover, even if a *prima facie* showing of obviousness had been made, I submit that this showing would be rebutted by the unexpected/surprising advantages of claimed processes. In particular, because the reactions of Jachmann, Koshar in view of Chandra and Koshar in view of Jachmann do not include devolatilizing a silicone oil obtained from a hydrosilylation reaction, which is conducted in the presence of a heterogeneous catalytic composition to reduce reactions that can form a gum and/or resin during devolatilization, these processes would not realize the surprising/unexpected advantages of the processes of claims 46, 47 and 48. That is, the heterogeneous catalytic composition makes it possible to significantly reduce isomerization reactions and opening of the epoxy ring during devolatilization to obtain transparent and translucent functionalized silicone oils that are stabilized and non-toxic. Because neither Jachmann nor the asserted combinations disclose or even suggest modifying the disclosed processes to include use of a heterogeneous catalytic composition in a hydrosilylation reaction to reduce reactions that can form a gum and/or resin during devolatilization and then devolatilizing a silicone oil obtained from the hydrosilylation reaction, to achieve the surprising and/or unexpected advantages of the claimed processes, I submit that the claimed processes would not have been obvious over these references.

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 12 15 2003 Stefan Breunig
Stefan BREUNIG



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DECLARATION PURSUANT TO 37 C.F.R. §1.132 BY
Gérard MIGNANI

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, ***Gérard MIGNANI***, state that:

(1) I am a citizen of *France*, and reside at *1 avenue des Frères Lumière, Lyon 69008, Rhône, France*.

(2) I have been employed by RHODIA from **1980** to the present date. My current title is *Expert Scientifique et Technique*.

(3) I was awarded a Ph.D. degree in **1980** from the University of Rennes. My *curriculum vitae* is attached hereto.

(4) I have substantial expertise in the field of silicone chemistry, including the preparation of functionalized silicone oils.

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Date:

December 12, 03


Gérard MIGNANI